

# CORE Organic

## CORE Organic Project Series Report

### Proceedings

## Providing organic school food for youths in Europe – Policy strategies, certification and supply chain management in Denmark, Finland, Italy and Norway

## Proceedings of the iPOPY seminar held at the BioFach February 20th 2009 in Nuremberg, Germany

iPOPY



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# State of the art of the project "innovative Public Organic food Procurement for Youth" (iPOPY)

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## 1. Why organic food for the youth?

Rising obesity rates among European children cause concern, for example within the European Commission (2003). In spite of the excess access to food, malnutrition and diseases related to food intolerance are also common, and call for new food serving approaches in public as well as in private settings. Hence, schools are increasingly becoming a "food arena" for public engagement, recently demonstrated by the EU decision to implement a daily free fruit school program (European Commission 2008). The European Commission has allotted funding for a School Fruit Scheme which will begin in the 2009/2010 school year, jointly funded by the EU and by participating national governments. The program is aimed at improving the health of young people in Europe, hoping that increased fruit and vegetable consumption patterns will continue into their adult lives. Although a number of countries rely on the family to provide pupils' food during school hours, publicly organized meal systems and fruit provision strategies are growing in Europe; this is partly due to longer school days and to assist busy families, but also due to public nutrition and sustainability strategies. Public food serving is utilized to achieve healthier eating and more sustainable consumption patterns, as shown by the strategy to accompany the mentioned school fruit scheme with "awareness-raising and educational measures" (European Commission 2008).

Another important option for sustainable school food is to serve organic products. Organic agriculture has less negative impacts on the environment, for example due to reduced loads of pesticides, and organic produce may have a higher quality (e.g. Brandt/ Mølgaard 2001). Hence, and due to the rapidly increasing consumers' demand, European countries promote organic food and farming, e.g. with a European action plan (Commission of the European Communities, 2004). Organic school meal programs provide an opportunity to increase the quality of the school food and hence the health and well-being of the pupils, to increase organic consumption, and to inform pupils about sustainable food patterns. The introduction of organic food in catering often implies that more focus is set on healthy eating (Mikkelsen et al. 2006; O'Doherty Jensen et al. 2001) because organic food strategies are usually guided by a committed food and nutrition policy. Further, organic food strategies often include "less meat, more vegetables" as a result of premium prices which are normally much higher for organic meat than for vegetables and cereal products. Such adaptations are often nutritionally sound.

However, public procurement for sustainable nutrition and the use of organic food is still an untapped potential, as Morgan and Sonnino state (2008). Even though numerous committed activists strive for high quality, organic school food this field has only started to develop most of the European states. A coordinated and well informed effort is needed to overcome enduring restrictions. But it is worthwhile, and the chances for society are huge because the youth of today are the future family parents. When they get introduced to organic food and farming in public settings like school education, it is more likely that they will buy organic food when they grow up.

## 2. iPOPY – a CORE Organic pilot project

The transnational research project "innovative Public Organic food Procurement for Youth" (iPOPY) was initiated in late 2006, when 11 European countries cooperated in the ERA (European Research Area) net CORE Organic to launch a joint call for research projects. The headlines of the CORE Organic call were animal health and welfare, food quality and market research, and iPOPY is one of two market research projects.

The main goal of iPOPY is to study how increased consumption of organic food may be achieved by the implementation of strategies and instruments used for public procurement of organic food in serving outlets for young people. Supply chain management, procedures for certification of serving outlets, stakeholders' perceptions and participation as well as the potential of organic food in relation to health and obesity risks are analysed. Our project period lasts for 3 years (2007-10), and the funding comprises 1.4 mill €.

### **3. Project approach and structure**

The research approach in iPOPY is a combination of qualitative and quantitative methods. Information is collected by structured and open-ended questionnaires and interviews. Statistics from public websites and reports are another important source of information. We have defined three to five relevant cases per country where drivers, hindrances and factors promoting organic food serving are being studied. Most of these cases are municipalities with an ambitious aim of public organic food consumption, but we have also included a Finnish congregation, Norwegian military camps and a music festival.

iPOPY consists of five work packages (WPs), studying policies (WP2), supply chains and certification (WP3), the young consumers' perception and participation (WP4), and health effects of organic menus (WP5). One WP (WP1) takes care of project management and draws the final project conclusions based on results and conclusions from all WPs. Further information is found on our web site, [www.ipopy.coreportal.org](http://www.ipopy.coreportal.org).

To facilitate the discussions in our research team, we have agreed on the following working definition of the key terms in the project title:

"Public organic food procurement for youth comprises all activities with regard to procurement in public food services for children and young people up to 25 years in schools and other public institutions for youth, such as day-care centers, universities, hospitals, and military facilities. The meal system is organized and its costs are carried, at least partially, by the public institution in question. Youth, or their parents, may need to pay for the food, at least in part. The food contains organic products conforming to EU-Regulations on organic production". Nölting et al. 2009a, p. 13.

iPOPY has attracted the interest of several talented students, who have used research questions related to the project to conduct studies and partly to produce theses to achieve an academic degree. The students have been active in the research team, and so far four theses have been published (Hansen et al. 2009, Marley 2008, He 2008, Sørnum 2008).

### **4. School meals - served and studied**

The main focus in the iPOPY project is on organic food served in schools, because schools are the most important common setting for young people in all of the participating countries. Finland and Italy both have a long tradition for serving warm school meals to their pupils. Italy is a pioneer in Europe to use organic and local products in school meals, whereas in Finland, both economy and lack of interest restrict the use of organic products in school meals. In Denmark and Norway, children bring a packed lunch and subscribe to milk and fruit served at school. This pattern is slowly changing, and publicly organised food provision is increasing, especially in Denmark. Some Danish municipalities have developed large organic school meal programs (see section 1.4). Norway was the first European country to introduce a daily free school fruit scheme in public schools. Good arguments for this decision were found in an intervention study documenting a long-lasting increase in daily intake of fruit and vegetables after pupils had had a period of free fruit serving at school (Bere et al. 2007). The school meal systems in the four iPOPY-countries and Germany are further discussed by Noelting et al. (2009b).

The organisation of school meals, and the extent to which organic products are integrated in these meals, were the topics of the first four reports from the iPOPY project (Bocchi et al. 2008, Hansen et al. 2008, Løes et al. 2008, Mikkola 2008). iPOPY has also arranged open workshops to discuss these topics during the Biofach fair in Germany 2008 (presentations available at [www.ipopy.coreportal.org](http://www.ipopy.coreportal.org)) and the 16<sup>th</sup> Organic World Congress in Modena, Italy in 2008 (Strassner et al. 2009). In January 2009, an open seminar focussing on iPOPY WPs 4 and 5 was arranged by Ruralia Institute at the University of Helsinki and attracted 34 participants from six European countries (Mikkola et al. 2009).

### **5. Project half way – some important results**

iPOPY has reached its half-way point. Several interesting studies have been conducted, and many more are under way. Doing research in a field where political initiatives and practical experiences are changing very rapidly is a challenge, but also increases the practical impact of the studies we perform. Altogether, the case descriptions, workshop and seminar proceedings and scientific papers from the iPOPY project comprise a valuable documentation of current public food procurement systems aimed at young people in Europe. Studying and working with youth is inspiring, and contributes to the dedication and creativity of the research team.

## **5.1 Italian caterers think organic is expensive**

In spring 2008, an extensive survey was made to collect opinions and information about main constraints related to the supply of organic foods in school canteens in Italy. 50 producers of organic foods and 50 caterers of food service for children were filling in a questionnaire, and some stakeholders were also interviewed. The main constraints for the implementation of organic products in public school procurement were economy and logistics, but the caterers also emphasize the distribution. More than 70 % of the producers think that the municipalities and the catering companies do not pay a fair price for organic products. Producers estimate that the extra costs of organic food as compared to conventional are 20 – 30 %, while the caterers estimate a premium price of 30 – 40 %. Caterers complain that organic products (especially fruit and vegetables) are not always available. About certification, the producers would prefer to certify the catering and the ingredients, whereas the caterers would prefer to certify the meal and/or the ingredients (Bocchi/ Spigarolo 2009).

## **5.2 Danish schools serve organic, but pupils stick to the packed lunch**

Denmark has no national regulations or funding for implementing meal provision systems. Even so, some municipalities have developed locally adapted school meal systems, often including organic food. The capital Copenhagen (52 primary schools), the city of Roskilde (19 schools) and the rural municipality of Gladsaxe (16 schools) have very different approaches, and were chosen for a study to examine various experiences (He et al., 2007). Key informants in each municipality were interviewed, focusing on barriers and future plans regarding an increased consumption of organic food in school meals. Copenhagen relies on a large centralized kitchen (KØSS) where meals are produced to be sold in a tuck shop at local schools by pupils organized by a trained teacher. In Roskilde, the meals come from a local organic catering company, and staff is hired to serve the food at the schools. Gladsaxe employs kitchen operators to prepare lunch at single schools, and a municipal coordinator is responsible for their education and supervision. In all municipalities, the amount of organic food consumed in schools has so far been well below the politically decided goals and ambitions. Although the organic share of the food supply has reached satisfactory levels in some cases, the total amount of food sold is low due to a limited number of users. On average, less than 25 % of the pupils buy the meals. The traditional lunchbox seem to have been shaping the eating style of school children for a very long time, and this habit is one of the barriers to increasing the application of organic school meals. Even if the organic school meals are not free for the pupils, a significant public financial support is needed for administration, infrastructure etc. Further, it is a challenge to develop an efficient and committed organization at the schools to be responsible for the meals. The schools themselves do not promote organic school meals, and some members of the school staff complain about getting extra work without sufficient resources. Further, no municipality makes any effort to promote their organic school meal programs to other municipalities, so it is difficult to use current experience to develop new and possibly more efficient systems.

iPOPYP results show that the KØSS system in Copenhagen has not managed to create a significant ownership among the pupils, and has also failed to integrate the organic message into the school curriculum. The potential to support organic and healthy food supply system with curricular strategies is huge, and should be emphasized.

## **5.3 Norwegian pupils relate organics to health**

In a M Ph thesis supported by iPOPYP, Marley (2008) made a qualitative study of four Norwegian lower secondary schools where organic food is being introduced to the pupils, either through the common school fruit/school milk schemes or through the schools' own school food initiatives. It should be noted that such initiatives are only found in a few Norwegian schools. Norwegian pupils bring their own food to school, which usually offers fruit and milk subscription programs. In a few regions, organic fruit or milk is available. The study examined if and how organic food is being included in the schools' curricula, and whether organic food education is being linked with environmental education topics. Whereas teachers and school administrators supported organic food because of the environmental benefits, the pupils generally drew stronger links between organic food and health. While it was important to have an enthusiastic staff member advocating for organic food in order for the program to be initiated, it was also important to involve a broad range of school staff in the process to achieve a larger consciousness among the pupils. Involving the pupils in the organic school food process - through school or community gardens, cooking and baking school meals, school trips to farms and so forth was also quite essential in order to get them interested in organic food and agriculture.

## 5.4 Festival participants use food as body fuel

One of the Norwegian iPOPY cases is the annual Øya music festival in Oslo, which has served organic food since 2003. By focus group interviews after the event in 2008, young people's experiences with organic food were explored. It was clear that festival food is regarded as "body fuel", not gastronomy, and that it was crucial for the festival guests to get much food for the money. For young people in Norway, organic food is closely linked with premium price, and sometimes with low quality due to long shelf storage in the shops. The informants were not convinced that exposing organic food at the festival would necessarily impact people's preference for buying organic food later, because a festival is seen as a limited case, insulated from everyday life. It might even be negative for an increased everyday/at home-consumption of organic food if such products become closely associated with festivals, convenience food and eating out of home (Roos 2009).

## 6. Conclusion

The work in, and deliverables so far from the iPOPY project have demonstrated that each country has its own history and cultural background, explaining the huge differences in current school meal systems and use of organic products. Each country has its own path of development in this respect; however, it is beyond doubt that school meal systems will change with time everywhere due to the pressing health and environmental problems as well as changes in the education structure (longer school days). These changes provide the opportunity to introduce the ideas of organic food – expressed e. g. by the four basic principles of organic agriculture: health, ecology, fairness, and care from IFOAM – into public food procurement for children and youth. However, these ideas are not static and fix, they need to be evolved in and adapted to the specific and complex context of POPY. There is much to learn from the four countries both with respect to challenges and problems, and with respect to good ideas and creative solutions. By our transnational research and activities, iPOPY contributes to carry this knowledge across boundaries. We consider this work to be a small, but very meaningful contribution to point out public procurement strategies for sustainable nutrition which can foster a more sustainable world for all.

## 7. References

- Bere, E./ Veierød, M.B./ Skare, Ø. and Klepp, K. I. (2007): Free school fruit – sustained effect three years later. *International Journal of Behavioral Nutrition and Physical Activity Research* 4(5), <http://www.ijbnpa.org/content/4/1/5>
- Bocchi, S./ Spigarolo, R./ Marcomini N. and Sarti, V. (2008): Organic and conventional public food procurement for youth in Italy. *Bioforsk report 42*, Tingvoll, Norway. <http://orgprints.org/13347/>
- Brandt, K. and Mølgaard, J.P. (2001): Organic agriculture: does it enhance or reduce the nutritional value of plant foods? *Journal of the Science of Food and Agriculture* 81, p 924-931.
- Commission of the European Communities (2004): European Action Plan for Organic Food and Farming. [http://ec.europa.eu/agriculture/organic/eu-policy/action-plan\\_en](http://ec.europa.eu/agriculture/organic/eu-policy/action-plan_en)
- European Commission (2003): Europa- Public Health Programme. Web site visited January 2, 2009. [http://ec.europa.eu/health/ph\\_projects/2003/action3/action3\\_2003\\_04\\_en.htm](http://ec.europa.eu/health/ph_projects/2003/action3/action3_2003_04_en.htm)
- European Commission (2008): School Fruit Scheme: Which role for the European Union? Web site visited January 2, 2009. [http://ec.europa.eu/agriculture/markets/fruitveg/sfs/index\\_en.htm](http://ec.europa.eu/agriculture/markets/fruitveg/sfs/index_en.htm)
- Hansen S.R./ Schmidt H./ Nielsen T. and Kristensen N.H. (2008): Organic and conventional public food procurement for youth in Denmark. *Bioforsk report 40*, Tingvoll, Norway. <http://orgprints.org/13349/>
- Hansen, M./ Laursen, R.P. and Mikkelsen, B.E. (2009): Design and pilot testing of a dietary assessment methodology for children. iPOPY report based on a Bachelor thesis at the National Food Institute, Technical University of Denmark, 2008. In press, will be made available at [www.orgprints.org](http://www.orgprints.org).
- He, C./ Mikkelsen, B. E. and Løes, A.-K. (2007): Organic school meals in the three Danish municipalities. Report. <http://orgprints.org/14061/>
- He, C. (2008): [Does organic food intervention in school lead to change dietary patterns?](http://orgprints.org/14573/) Master thesis, Technical University of Denmark. <http://orgprints.org/14573/>

- Løes A.-K./ Koesling M./ Roos, G./ Birkeland L. and Solemdal L. (2008): Organic and conventional public food procurement for youth in Norway. Bioforsk report 43, Tingvoll, Norway. <http://orgprints.org/13346/>
- O'Doherty Jensen, K. et al. (2001): Økologiske fødevarer og menneskets sundhed. (Organic foods and human health). Rapport fra videnssynthese udført i regi af Forskningsinstituttet for Human Ernæring, KVL, Forskningscenter for Økologisk Jordbrug, 132 p. [http://www.foejo.dk/publikation/rapport/Rap\\_14.pdf](http://www.foejo.dk/publikation/rapport/Rap_14.pdf) . In Danish.
- Marley, E.K. (2008): [Food for Thought - Introducing Organic Food in Norwegian Schools](http://orgprints.org/14573/). Master Thesis, Senter for Utvikling og Miljø/Centre for Development and the Environment, University of Oslo. <http://orgprints.org/14573/>
- Mikkelsen, B.E./ Bruselius-Jensen/ M., Andersen/ J.S. and Lassen, A. (2006): Are green caterers more likely to serve healthy meals than non green caterers? Results from a quantitative study in Danish worksite catering. Public Health Nutrition 9(7), p. 846-50.
- Mikkola M. (2008): Organic and conventional public food procurement for youth in Finland. Bioforsk report 41, Tingvoll, Norway. <http://orgprints.org/13348/>
- Mikkola, M./ Mikkelsen, B.E. and Roos, G. (2009): Like what you get? Is it good for you?
- Organic food, health and sustainable development in schools. Proceedings of the seminar held at university of Helsinki, Ruralia Institute 21.–22.1.2009, Helsinki, Finland. CORE Organic Series Report. <http://orgprints.org/15275/>
- Morgan, Kevin and Sonnino, Roberta (2008): The School Food Revolution. Public food and the challenge of sustainable development. London: Earthscan.
- Noelting, B./ Løes, A.-K. and Strassner, C. (2009a): Constellations of public organic food procurement for youth. An interdisciplinary analytical tool. Bioforsk report vol 4 No. 7, iPOPY discussion paper 1/2009. [www.orgprints.org/15302/](http://www.orgprints.org/15302/)
- Noelting, B./ Strassner/ C., Løes, A.-K and Nielsen, T. (2009b): Bio-Schulverpflegung in Italien, Finnland, Dänemark und Norwegen – Was kann Deutschland lernen? (Organic school food procurement in Italy, Finland, Denmark and Norway- which lessons can be learned for Germany?). Paper for the 10th scientific German congress about organic food and farming, Zürich, February 2009. In German, [www.orgprints.org/14420/](http://www.orgprints.org/14420/)
- Strassner, C./ Løes, A.-K./ Kristensen, N.H. and Spigarolo, R. [Eds.] (2009): Proceedings of the Workshop on Organic Public Catering at the 16th IFOAM Organic World Congress, 19th June 2008 in Modena, Italy. Core Organic Project Report Series, in press, will be made available at [www.orgprints.org/15203/](http://www.orgprints.org/15203/)
- Sørum, H. (2008): Økologisk mat i Forsvaret – soldatenes holdninger til økologisk mat og landbruk (Organic Food in the Norwegian Defence - the Soldiers' Attitudes to Organic Food and Agriculture). In Norwegian. Bachelor thesis, Akershus University College, 68 p. [www.orgprints.org/15303/](http://www.orgprints.org/15303/)